C 252 /352 cont./

The fin begins by being opened and cleaned and only then is it boied or roasted. In this last case it is inserted between the two branches of a switch split for three quarters of its length (Fig. 22). So that the latter does not open completely, the lower part is fastened securely with bands of bark, and so that the fish does not fall out once it is inserted in the interstice, the upper part. Among their ancestors, the Guarani, G [252] such a spit would have been superfluous, because to grill the product of their fishing or hunting they used to construct C [251] [262] buccans. Our Chiriguano also eat fish dried in the sun and enjoy it in this form combined with some corn dish.

/353/

Chapter IV

Cooking

Fire

C 372 177 The modern Chiriguano more and more use matches of Bolivian make, but their poor quality has contributed to maintaining the popularity of the tinderbox. That of the Chiriguano, borrowed recently from the white men, is composed of a flint and a piece of iron with which they make sparks fly, which fall on a little wild cotton (the one which the fruit of the palo borracho (Chorisia insignis) produces). This tow (tata rimbiuna) is kept in a small receptacle made from the end of a cow horn or an armadillo tail. /Figs. 23 and 24 appear here./ It is hermetically sealed by a wooden disk, which a small cord passing inside the capsule and coming out through a hole at the tip of the horn or tail allows to be put back in place with a single motion. This ingenious contrivance is not, however, of Indian invention; I saw it adapted to the tinderboxes of the creoles in the Argentine Republic. Some Chiriguano make cloth wicks which at first sight would seem C [415] [281] to have been produced in one of our factories. The tinderbox with its accessories is carefully kept in small bags of deerskin, wildcat, iguana, etc. (Figs. 23 and 24).

/353 cont./

372 [971] In former times the Chiriguano made fire exactly like all the Indians of South America, by rubbing two sticks one against /354/ each other. One of my friends from Carurutí reconstructed one of these devices for me in the hope of surprising me and getting a good price for it. He took two sticks of tata iwira, or fire wood (1), cut one of them lengthwise

[824]

1. According to Father D. Giannechini (Diccionario Chiriguano-Español, etc., p. 91), the Chiriguano might use, for obtaining fire by rotation, sticks made from the wood of a red liana whose

415 281 372 ←

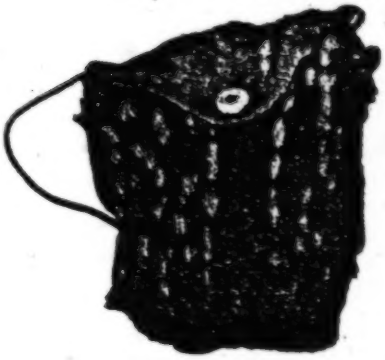

Fig. 23. Small deerskin bag in which a Chiriguano used to carry a tinderbox and its accessories. Prov.: Pípi. (1/3 nat. size.)

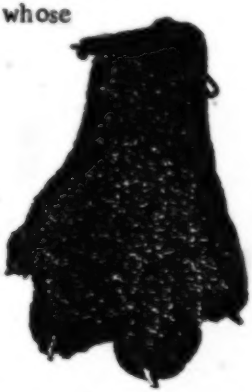

Fig. 24. Puma paw (yagua-pintaipo) made into a bag. Prov.: Saladito. (1/4 nat. size.)

415 281 →

372 [824] flower has five yellow petals with a red spot on one of them. The Chiriguano name for this plant is isipo-pinta.

and provided one of its sides with two cups along which he contrived a perpendicular groove. These two little furrows were intended to conduct the glowing sawdust onto the tinder placed on the ground. /Fig. 25 appears here./ The other stick was slightly sharpened to allow it to go into the cups. Since this

824 /16 cont./
139
[14] I am going to make a brief list of some trees and plants which I know, without pretending to be a botanist, a subject I have not studied. I shall only say that I have learned it through experience and careful reading; when describing certain plants, I shall also make note of the use made of the bark, root, leaves, and branches of some.

ACACIA BALSAMICA. -- This is the quina-quina, under which name it is known here in Chiriguano country, a tall, straight tree, whose wood is ideal for building because the wood borer does not damage it; it is much used here in the construction of upper roofs, especially for the braches or trusses on which the roof frame is to rest. It is plentiful in Cordillera Province and even in Acero Province.

/17/ ACACIA SAPONARIA. -- This tree is large and its
[342] wood light, perhaps even lighter than cedar, but it is of less
[492] value; it is whitish and much used for making doors and windows, but the main use to which said wood is put is in saddleries to
[296] make pads for saddles. The seeds are similar to monkey ears
[515] and are good for washing clothes and to keep the skin of the face free of blemishes; here it is known by the name "timboy."

ACACIA AMARILLA /A. moniliformi/. -- It is a medium-sized tree of rather lightweight hardwood, for which reason drawers or wash basins and yokes for oxen are made with it.
[372] It is no good for making fire, because it smells when it burns from which it gets the Chiriguano name "Tatane," fire that smells; the wood is yellow.

ACACIA ASTRINGENTE. -- There are many groves of
[342] trees of this class here and there; it is the most abundant tree,
[281] the wood is good for small joists because the wood borer does not eat it; the bark contains much tannin, and it is the wood most used for tanning hides by both Indians and whites; the latter call it sebil and the former "Curupau."

245 ACHIOTE. BIXA ORELLANA. -- This is cultivated in
137 fields and gardens, grows to a height of two and a half meters,
824 its leaves are dark green; it produces abundant fruit in a sort of pod covered with bristles and filled inside with fiery red seeds, which are what makes the little tree highly valued. They
[302] serve as food coloring, and the Chiriguano paint their faces
[303]
[439]

/32 cont./

*136 bending or breaking every bush in its path. It is also a swimmer.
*825 Saddlemakers make from its hide headstalls and reins which
●[281] are durable and hence highly valued. When the tapir is very small, it has a pelt like a fawn with yellow stripes and is easily domesticated. It is abundant near rivers and is very rare on the plains; few are found in the province of Acero. In the region of Cuevo and in others there are none at all, doubtless because these places are being settled by another type of man, that is to say, by whites, who can destroy them easily with the use of gunpowder. The Chiriguano like its
[262] meat very much, and they call this animal "Borevi."

ARDILLA /squirrel/. -- A climbing quadruped which looks for its food in the trees which it climbs and goes down very quickly. There are two classes of these, one large and red in color and the other smaller and dark, but both are very graceful, with a rather long tail almost as large as the body as far as the neck and covered with rather long and very soft hair. When they sleep, they cover themselves up and protect themselves from the cold, the dew, and even from the rain with this tail, which they keep horizontally along the length of the body in order to climb and descend more nimbly. They
[262] have very little meat, which is full of gristle, and, despite
[224] the fact that they are quite edible, the Indians hunt them very
[857] little; only the children hunt them for diversion and for practice in the use of the bow.

ARMADILLO. -- This animal, called "Tatu" by the Indians, is abundant. There are six types, which are: "Tatu," the generic name, or the true armadillo; "Taturapúa," balled armadillo; "Tatu rabucu," armadillo with hairs; "Tatu guasu," large armadillo; "Tatu acuti," a species of viscacha; "Anguya tutu," a species of large rat, but also with scales in common
[262] with the armadillo. For the Indians the flesh of all of them
[224] is edible, and the Indians of Yvu and Itatiqui continually go out hunting them. In dry places, like the pampas of the Gran Chaco, armadillos are more numerous; there they make their burrows under the ground in great lengths, making it dangerous to go on horseback through such places because the animals can sink in easily and at a gallop can break their legs, if they are not unlucky enough to crack their heads open. /Illustration appears here./

[Text Continues on P. 53]

/33 cont./

*136 *825 CORSO /deer/. -- This is found everywhere and is called "Huasu" by the Chiriguano and hurina by the whites: there are even white ones, the females without horns and the males with them: another type is called "huasucaca." Both feed off [231] grass, and the little ones are pleasing with their hide dappled with light spots: they are easily domesticated while they are still nursing: for food, when they are domesticated, goat's or sheep's milk can be used. The huasucaca is very similar to the deer: both male and female have branched antlers when old, but /34/ their meat is not as good. They travel in herds. [262] Hunters pursue both types because they have a lot of meat, for [224] which reason they are called "huasu," which means "large." They hunt them with considerable work and with the help of dogs trained for the purpose, or, if they are hidden, they imitate their bleating or cracking sound, and when they come within bowshot, they do not miss in killing them. The [281] Chiriguano tan the skin of these animals and make a jacket [291] from it, which I shall discuss in its place, but today this de luxe Chiriguano garment is disappearing, nor do they tan leather any more: today they use these skins for their beds: it is nonetheless a perfect material for footwear because of its natural softness and smoothness.

*136 GAMO /fallow deer/. -- It seems that this class of animal is from the mountainous and temperate region: it is not found beyond Monteagudo, nor do the Indians here know it, but it used to be found and still is found in their former territory of Padilla, Tomina, Tarvita, etc. This is the fallow deer, the size of a goat, with cloven hoof, ash-gray in color, and quite a swift runner: it is herbivorous, quite edible, and goes in herds.

GUANACO. -- This is a kind of camel, from which it differs in size and because it does not have a hump. They are found in abundance at the top of the high hills of Potosí and other cold mountains: it thus seems that the hills and the cold must be congenial places and the only ones in which they can prosper. Nevertheless immense herds of this quadruped can be found in the pampas of the Gran Chaco, where the heat is oppressive and where there is nearly always a scarcity of water: it is easily domesticated and in this state is a real llama.

/40 cont./

224 animal is capable of distinguishing between the brave and
*[225] the cowardly, and the latter is the first to be attacked and consequently to be badly injured.

*925 Jaguar skin, as I have already said, has intrinsic value;
[955] it is used in saddleries for the bottom padding of saddles and
• [950] for saddlebags; it is a luxury for persons of rank. The ani-
[951] mal has a quantity of fat, and this is a good remedy for
[939] rheumatism, aching bones, and other ailments; the Indians take it and sell it in the interior of the Republic and trade it for used clothing. It is to be noted, however, that they do falsify it, as they also falsify snake grease, because it can be understood that the killing of this ferocious animal is not a
[941] frequent thing. Rarely does the Chiriguano hunt the jaguar, and he is not always inclined to help the white man, but the latter forces his peons to do so, and they gather the fat and
[942] sell or present it to their friends or relatives. Jaguar meat is good food, although, to be sure, it smells wild, as does the skin, but this meat, if placed in salt water or brine overnight, loses its bad smell; they assert that this meat is like that of a cow.

*136 The male jaguar is quite large. I measured one, and it was two meters long from the tail, one meter high, and it weighed seven arrobas. The female is smaller; I measured one that had just been killed; from the tail it measured one meter and ten centimeters, was 75 centimeters high, and
[731] weighed four and a half arrobas. The female gives birth every three years, and the newborn cubs are always a pair, one male and one female; the mother is most dangerous when she has young /illustration appears here/ /41/ and defends them at any cost, but hunters first kill the mother and then try to catch the cubs alive; they almost always succeed and take them home to domesticate them, but this is an impossible job because they are jaguars forever; I have seen two of these cubs well chained but very bad. In general, cubs when taken away from their mother die in a few days either through lack of adequate food, which is milk, or also out of desperation upon finding themselves in the midst of beings foreign to their nature.

/173 cont./

342 The canes, or sticks, are attached in the same way as in the roof, with the difference that for the walls they are put in double order, outside and inside, so that they can serve as a support for the dampened earth, which in the end is like a large bag, long and tall, around the house. This other work [462] is done by the Indian men, engaged beforehand by the promise of chicha: next they too dig in the wet soil /174/ dampened by the rain or by water, and help the women in the operation of forming the walls.

With such simplicity, the four walls are raised in a single day, everything being completed: at the present time almost all houses have a gallery where the men and women always sit to enjoy the cool of the mornings and the evenings in friendly gatherings, a gallery which is even used for sleeping on excessively hot nights, especially when inside there is an abundance of vinchucas and other insects (1).

346 496 1. In Parapiti a school for 150 girls was built and finished in 12 hours; nothing had been prepared for this building; it was planned the day before and done at once by all the inhabitants.

342 With the erection of the gallery, the house is completely finished, and the Indian content and satisfied. In present-day buildings care is taken to place the door, or entry, at one end of the house which corresponds to the gallery, and many have two, one in front of the other, in order to have a way to the patio which they make with a fence of thorns for greater comfort.

342 The doors are of cane, which they tie together like mats, but vertically, with ceiba bark or with cowhide thongs, which are more durable indoors. If an Indian can get a cowhide, he makes a door of Guayapa wood, or, as the whites call it, zacharrosa, or another soft wood, which he puts in a hole left in the construction; he makes another frame with its hinges made of the same wood, soaks the hide, and fastens it in this

/174 cont./

342 281 second frame, taking care that it is not very tight so that when it dries it will not warp. He attaches this hide from behind with thongs of the same material, and the result for them is a door de luxe, which could be envied even by some whites, who, in spite of the fact that they have hides, either cannot find anyone to work them for such a door, or who out of avarice and in order not to spend a few coins do not concern themselves with such a comfort (2).

342 322 2. Some of them make very crude doors with two pieces of thorny ceiba wood, which they work perfectly with a knife. No Chiriguano puts a window in his house.

Ancient Houses

342 177 178 Some of my readers perhaps may have believed that the house and its mode of construction just described go back to the origin of the race. /175/ This belief would be an error, because they must understand that the above-mentioned is the result of progress. The method of building houses like the present ones is relatively new: they learned it from the whites, especially from the inhabitants of the Santa Cruz area, where the houses all have galleries, this being noted even in the capital of the department, although they may be of much more importance and may be disappearing in the new buildings. But 784 in Monteagudo, Lagunillas, Charagua, and centers where the Chiriguano have their holdings, houses have galleries.

Those, in addition to giving the houses a better appearance, in addition to the indisputable utility, are a very great reinforcement and protection for the walls of the house, not allowing the torrential rains to wear away or demolish the plastering that 342 they do in all the houses. It is true that many houses of the 171 whites in their towns are of adobe, but when the timber is of + superior quality it is almost preferable, because this material REMAINS JOINED BETTER AND IS MORE COMPACT

4c Nino--380 M-3 (1890-1911) 1912 SF10 Chiriguano SF10

/189 cont./

291 Clothing in the fashion of Adam is still seen everywhere. In the towns the men, and almost everywhere the women, are at least dressed from the waist to below the knee, because for work or for coolness the Catarra or Ipoy, which can cover them up to the shoulders, is allowed to fall to the waist, the rest being left visible.

Gala Dress

292

For the ancient Chiriguano, the Anbícuai, doublet, was fine and festive clothing. This single name includes the Guaupi tangan, hat, the Anbícuai, sagum or frock coat, and the Guaupi timbian, breeches. Because the doublet is an object of luxury, they do not all wear it, its use being limited to the grandees or caciques, to rich men, and to sorcerers. It is made entirely of tanned skins, which are those of the wild boar, peccary, or pygmy deer. They are tanned with the bark of the Cuyuyu, the astringent acacia or anil, which contains a great deal of tannin.

Skillful men are needed to make a complete doublet like the one made in the Santa Rosa Mission by the Indian Cachupari, which, when taken to the Turin exposition, was acquired by the Florence Museum, along with the skull that I acquired in Curuyuqui and other objects, such as the Yandugua, a kind of parasol of ostrich feathers, etc., objects which the missionaries of Potosí sent along with the missionaries of Tarija (2).

2. The missionary who was charged with taking all the things to the exposition and leading the Chiriguano of both sexes, as the program directed, was the late Franciscan Father Doroteo Giannecchini.

/139/

291 The crown of the hat is made of four oval parts, as is
294 the brim which surrounds it, sewed with fine cords of the same material, and the edge of the brim is turned upward. The hat has a band of the same material sewed to both sides at the temples to hold it to the throat; a knot or a ring on the band can be used to tighten it.

292 The Ambácua, which lends its name to the whole outfit,
281 is a perfect cassock, but its form is entirely Chiriguano, for it does not hinder the movement of the arms. Its cut is not straight, and both parts are made fast at the chest with two leather straps, which are run through the holes on the opposite side. The cassock in back ends in two points, where there is a kind of ornamentation of the same leather, which consists of short, fine strips, like a tassel. The sleeves are wide, as is the whole garment, and are attached to the shoulder, being open at the armpit so as not to impede the movement of the arms, either in hunting or in war, where the grandees also wear it. In fact, in the photograph taken in Santa Rosa to be
[124] sent to the exposition, a hunter and a warrior dressed in this doublet appear outside the circle. In the middle there is a
529 554 562 Chiriguano woman with her crown and adornments as queen of the fiesta, who offers chicha to all who are enjoying themselves (1).

[125] 1. The queen is the one who serves the dancers as mistress and patroness of the fiesta. This photograph or figure will not be reproduced in the chapter dealing with fiestas because I could not obtain it.

292 The Timbian, breeches, is also of leather and is made
[281] of four pieces, wider from the waist to the sacrum and narrower from the thigh to the bottom. It is quite wide and comes to the ankle. It is rougher than the rest, but more valued, and they will give anything to have even a single pair. This garment is tied at the waist with a belt or with two strings which are sewed across the entire width of the garment itself.

/118 cont./

291 [256] Others who are not hunters, and hunters themselves when they are not engaged in this activity, fasten the breeches at the waist with a belt that they call Cuacuá: their wives weave it: it is made of wool and painted in various colors. They all have one, except some of the old men.

415 [234] [482] Another of their conveniences is the Urupucu, long bag in its literal translation. The Urupucu seems to be the Chiriguano's own: it is of tanned wild boar or pygmy deer hide, narrow at its opening, which they close with a little cord, gathering the opening: they sew around, and through the seam they pass the cord, which is rather long so that it can hang from one shoulder and be passed to the opposite armpit like a horseman's carabela. This bag is used as a container for carrying provisions on a trip. In it they put boiled meal, parched corn and charqui. This is done by warriors, hunters, and travelers, and, well secured, as has been explained, it is never lost.

415 484 312 Finally, there is no lack of another convenience for carrying water. In order not to experience the effects of burning thirst, he has a type of gourd with a hard shell like that of the matés: he empties it, removing the pulp and seeds, making a hole in the middle, puts it in a kind of net of cords, leaving one or two larger meshes near the hole placed at the top, where the Chiriguano himself makes a small circle, fills it with water, stops it up with a maize cob, and during a trip uses it sparingly, if he has foresight, or else he may not have it when he needs it most (2).

2. The Indians who are governed by corregidors in the region of the Gran Chaco traveled with their respective tarí or tutuma on their expeditions to the desert of Paraguay.

S:Nordenskiöld E-5,4 (1908-1909. 1913) 1920
SF10 Chiriguano SF10
Chané SF8

Their spindles are of the Bakaïri type with a knob. (See Part. I map 35). The spindle discs are sometimes of stone. The Chané at Rio Parapiti sometimes use when spinning a small earthen plate made for the purpose, on which the spindle is whirled.

The preparing of leather.

The Choroti and Ashluslay have no knowledge of tanning, where as the Chiriguano, Chané, Toba and Tapiete have. They use the bark of Piptadenia and other trees.

These Indians have, in all likelihood, learnt the art of tanning from the Whites who, in these tracts, are more skilled in leatherwork than in any other trade. Tanning seems to be unknown to all Indians in S. America who are either untouched or but slightly influenced by White civilization.

The carving and ornamentation of calabashes.

The Chiriguano Indians, as well as the Chané make very great use of calabashes. They are used as receptacles for water and maize-beer; as boxes, humming-tops, bowls and, above all, as drinking-vessels. At festivals maize-beer is handed round in elaborately ornamented calabashes.

Sometimes the calabashes are provided with lids. These are so made that lid and box are of the same fruit. Now and then star-shaped lids occurs. Lids with a shutting arrangement of the type shown in Fig. 50 A are characteristic of these Indians.

I published in Part I a map showing the distribution of calabashes with lids. From this map we see that these are probably a culture-element which the Indians east of the Andes received from the western area of civilization.

I scarcely think, at any rate, that the star-shaped lids can be cut out so as to fit tight on the box, save with a metal tool. It could hardly be done with a stone or bone implement.

/247 cont./

The Chiriguano and Chané men are clever in the decoration of calabashes (Fig. 126), carve attractive pipes (Fig. 120), and know how to tan leather, which they probably learned from the whites.

Among these Indians one does not see much in the way of plastic representations of animal and human figures. The clay /248/ vessels sometimes have animal shapes. The Chané women on the Rio Parapiti fashioned lumpy little dolls out of wax for their children (Fig. 105). Some of the clay vessels are painted with animal figures. A vessel from the Rio

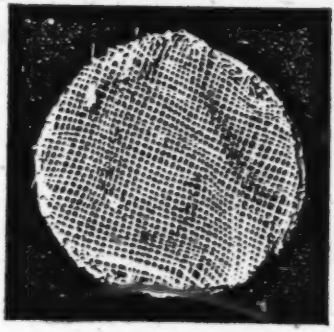

Fig. 124.
Sieve. Rio Parapiti.
1/8.

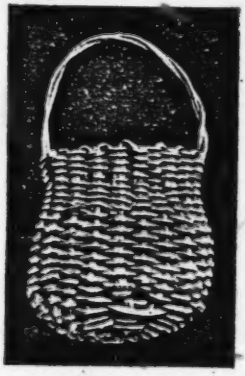

Fig. 125. Basket
Chiriguano.
Caipipendi. 1/6.

Itiyuro, which I acquired through barter, is adorned with tree figures. Occasionally one sees clay vessels in the shape of fruits.

I saw drawings representing human beings and animals on the walls in a few Chané huts and on a few Chiriguano calabashes from the Caipipendi valley.

As for basket work, the sieves are so popular among the whites that through trade they are being distributed far beyond the Chiriguano and Chané region. Otherwise the Chané and Chiriguano make few baskets. We find basket work in quantities only among the Indians where the matching-leaved palms begin, and that is at Santa Cruz de la Sierra.

/76 cont./

The Working of Skins and Leather Tanning

The Chiriguano and Chané know the art of tanning leather, and they use for that the bark of the "Piptadenia" and other trees. No doubt they obtained the knowledge of this craft from the whites. They use not only tanned leather, but also strips of animal skin for the making of sundry objects (279), but the

279. Nord. 2, p. 165.

craft of working leather and skins is not an important one. It is said that formerly the Chiriguano, when they went hunting, wore leather clothing conforming to the European style (280).

280. Nord. 1, p. 184. Nord. 2, pp. 60, and 61. Viedma, op. cit., p. 181. Cited in Nordenskiöld.

Beyond that, leather is not used for making clothing, except to make sandals (281). The men's modern custom of wearing

281. Nord. 2, p. 69, Fig. 23.

a leather belt must be attributed to the influence of the whites. Without counting its application to the making of bridles and saddles for horses and asses, either draft or saddle animals, on which we have no data, strips cut from leather or from animal skins are used in the form of straps, principally to transport or hanging up some object. In place of the common vegetable-fiber cords, leather straps are often put on the nets for carrying burdens, on hammocks, and also on the hoops mentioned above, in which they keep things. The band of the Chiriguano net for carrying burdens I. A. 564 consists of an untanned cowhide strap. See Figure 134 /see p. 209/. The Izozó vessel I. A. 617 has a leather strap attached to its handles. The strings of the bows for shooting arrows are strips of animal skin, and the Chiriguano net I. A. 573 is made of cowhide strips.